

WHAT WE CLAIM IS:

1. A method for controlling copyright of digital data encrypted and supplied from a database to a user, wherein:

5 a utilization permit key including a decryption key for said digital data is supplied from a key control center to said user;

said utilization permit key comprising at least one of the following:

a display permit key for displaying said digital data, an edit permit key for editing said digital data, a storage permit key for storing said digital data, a copy permit key for copying said digital data, a transfer utilization permit key for transferring said digital data; and  
10 said user decrypts said digital data using said permit key and performs at least one of the following operations as provided by said utilization permit key:

15 displays said digital data, edits said digital data, stores said digital data, copies said digital data, transfers said digital data.

2. The method for data copyright control according to claim 1 wherein a digital signature is given to said digital data.

20 3. The method for data copyright control according to claim 1 wherein at least one of the following copyright control elements is used in addition to each of said permit keys:

a copyright control program for controlling copyright of said digital data;  
25 data;

copyright information for copyright of said digital data;

a copyright control message for use of said digital data under copyright.

4. The method for data copyright control according to claim 3  
30 wherein said copyright information is stored, copied and transferred together

with said digital data when said digital data is stored, copied and transferred respectively.

5        5.        The method for data copyright control according to claim 3 wherein history information for edit, copy and transfer of said digital data is added to said copyright information when any one of said storing, copying and transferring operations is performed on said digital data.

10       6.        The method for data copyright control according to claim 1 wherein at least one of said permit keys of which said utilization permit key is comprised is encrypted.

15       7.        The method for data copyright control according to claim 6 wherein said encrypted data is decrypted by said copyright control program.

8.        The method for data copyright control according to claim 3 wherein said copyright control program is encoded.

20       9.        The method for data copyright control according to claim 3 wherein at least one of said copyright control elements is supplied together with said utilization permit key.

25       10.       The method for data copyright control according to claim 3 wherein:  
at least one of said copyright control elements is supplied together with said encrypted data from the database; and  
said utilization permit key is supplied from said key control center.

30       11.       The method for data copyright control according to claim 3 wherein:

a first part of at least one of said copyright control elements is supplied together with said encrypted data from the database; and

a second part of at least one of said copyright control elements is supplied together with said permit key from said key control center.

5

12. A method for controlling copyright of digital data encrypted and supplied from a database to a user, wherein:

a permit key including a decoding key for said digital data is supplied from a key control center to said user;

10 said permit key comprising at least one of the following use permit keys:

a display permit key for displaying said digital data, an edit permit key for editing said digital data, a storage permit key for storing said digital data, a copy permit key for copying said digital data, and a transfer permit key for transferring said digital data;

15

said user performs at least one of the following operations using said permit key:

displays said digital data, edits said digital data, stores said digital data, copies said digital data, transfers said digital data;

20

said digital data encrypted is decrypted when said digital data is displayed and edited; and

said digital data is encrypted again when said digital data is subjected to one of the following operations: storing, copying, transferring.

25

13. The method for data copyright control according to claim 12 wherein a digital signature is given to said digital data.

30

14. The method for data copyright control according to claim 12 wherein at least one of the following copyright control elements is used in addition to each of said permit keys:

a copyright control program for controlling copyright of said digital data;  
copyright information for copyright of said digital data; and  
a copyright control message for using said digital data under copyright.

5

15. The method for data copyright control according to claim 14 wherein said copyright information is stored, copied and transferred when said digital data is stored, copied and transferred respectively.

10 16. The method for data copyright control according to claim 14 wherein history information for edit, copy and transfer of said digital data is added to said copyright information when said digital data is edited, copied and transferred respectively.

15 17. The method for data copyright control according to claim 12 wherein at least one of said use permit keys of which said permit key is comprised is encrypted.

20 18. The method for data copyright control according to claim 17 wherein encryption of said digital data is decrypted by said copyright control program.

19. The method for data copyright control according to claim 14 wherein said copyright control program is encrypted.

25

20. The method for data copyright control according to claims 14 wherein at least one of said copyright control elements is supplied together with said permit key.

21. The method for data copyright control according to claim 14 wherein at least one of said copyright control elements is supplied together with said digital data encrypted from the database; and said permit key is supplied from said key control center.

5

22. The method for data copyright control according to claim 14 wherein a first part of at least one of said copyright control elements is supplied together with the digital data encrypted from the database; and a second part of said at least one copyright control element is supplied together with said permit key from said key control center.

10

add B1